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10/749,003	12/30/2003	Thomas Schwalb	449/124	8381

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EXAMINER	
SINKANTARAKORN, PAWARIS	
ART UNIT	PAPER NUMBER
2416	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/749,003	SCHWALB, THOMAS	
	Examiner	Art Unit	
	PAO SINKANTARAKORN	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/14/2008 has been entered.

2. Claims 1-27 are currently pending in the application. Claims 28-62 have been canceled.

Claim Rejections - 35 USC § 103

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adamany et al. (Newly Cited US 6,615,041).

Regarding claim 22, Adamany et al. disclose a method performed at an interface location between first and second networks (see column 8 lines 14-19), comprising the steps of:

receiving a telephone transaction initiation or response message that originated with a telephone set or node currently located in a first network (see column 7 lines 16-25 and column 8 lines 27-38, receiving the registration message originated from a wireless unit), the message bearing the address of the initiating node in the first network (see column 7 lines 16-25, the registration message includes ESN and MIN of the wireless unit), the first and second networks using disparate signaling protocols (see Figure 3 translator, abstract, column 7 lines 10-13, column 9 lines 51-67, column 12

lines 1-11, and column 13 lines 60-64, translating or altering registration message/response and the international gateway supports ANSI and ITU imply that the first and second mobile stations use different message protocols);

querying the originator's home registration database using the network protocol of the second network to determine the registration status of the originator (see column 10 lines 5-30, routing the registration message to the MSC-H to determine the validity of the wireless unit);

forwarding registration status information to the first network in the network protocol of the first network (see column 11 line 51 – column 12 line 21, forwarding the response to the MSC-V, then eventually forwarding to the wireless unit), wherein the method is performed on a computer that does not perform any functions of the computer on which the home registration is located (see Figure 1, international gateway does not perform HLR/VLR functionalities).

regarding claims 23, further comprising the step of converting a format of the initiation message into a format utilized by the first network (see column 6 lines 28-37 and column 10 lines 19-35);

regarding claims 24, the step of converting the format of the message is performed by matching values of the format of the message with values of the format utilized by the first/second network (see column 6 line 60 - column 7 line 9);

regarding claims 25, further comprising the step of converting an address of the telephone set from a format utilized by the second network into a format utilized by the first network (see column 6 lines 28-37 and column 10 lines 19-35);

regarding claims 26, further comprising the step of generating a destination point code (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the domestic GMSC);

regarding claim 27, the step of generating a destination point code further comprises inserting a virtual point code (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the domestic GMSC).

7. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertacchi (US 6,625,461) and Gallagher et al. (US 5,933,784) in view of Adamany et al.

Regarding claims 1, 8, and 15, Bertacchi discloses a method, comprising the steps of:

receiving an originating telephone transaction message from an originator on a first network, the originating message having a first network messaging protocol and requesting subscriber information from a home registration database located on a second network, the first and second networks using disparate messaging protocols (see column 6 line 13 – column 7 line 9 and column 10 lines 19-35, a domestic VMSC or GMSC receives an originating MSCID from a first mobile station, the domestic VMSC or GMSC then request current location information of a second mobile station from a foreign Home Location Register (HLR), wherein the domestic and foreign VMSCs or GMSCs might not recognize the received (originating or terminating) MSCIDs, which implies that the first and second mobile stations use different message protocols);

converting the first network messaging protocol of the originating message into a second network messaging protocol suitable for the second network (see column 6 line 60 – column 7 line 9, the domestic VMSC or GMSC translates the received MSCID into a MSCID compatible with the signaling system used by the foreign cellular network);

forwarding the converted originating message to the home registration database of the second network (see column 6 lines 28-37 and column 10 lines 19-35, the domestic VMSC or GMSC contacts, via an international signaling connection, a foreign HLR; the domestic GMSC converts the originating message containing MIN to a location request message containing MSCID and sends the location request message to the foreign HLR.);

receiving a responding message from the second network, the responding message having the second network messaging protocol (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the domestic GMSC);

converting the second network messaging protocol of the responding message into the first network messaging protocol (see column 6 line 60 – column 7 line 9, the domestic VMSC or GMSC translates the received MSCID into a MSCID compatible with the signaling system used by the foreign cellular network; in this case, the foreign cellular network is the originating network because the originating network is foreign to the destination network); and

forwarding the converted responding message to the originator (see column 6 line 60 – column 7 line 9 and column 10 line 58 – column 11 line 12, the location

response message is then sent to the domestic GMSC, the domestic GMSC then forwards a response to the first mobile station to inform the first mobile station of the completion of the connection setup).

Bertacchi does not disclose that the method is performed at a single interface location between the two networks. However, Gallagher et al. from the same or similar fields of endeavor disclose a method for performing conversions at a single interface location between two networks (see Figures 2-3, abstract, column 6 lines 36-64, and column 7 lines 12-28, Signaling Gateway 202 converting between a first network to a second network, and vice versa).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement a method is performed at a single interface location between the two networks as taught by Gallagher et al. into the method of Bertacchi.

The motivation for implementing a method is performed at a single interface location between the two networks is that the signaling gateway is located outside of both the two systems and, therefore, can be utilized by many systems as opposed to only the system in which it is located in (see column 5 lines 32-36).

Bertacchi and Gallagher et al. fail to teach the method facilitating communications between a home register database and a computer operable on the second network, so that authorization commands can be issued directly from the home register database to the computer on the second network; the means for converting employing a single entry to represent plural subscribers on the second network that

have roamed to the first network; and the means for converting operating in a separate computer system from a home registration database.

Adamany et al., from the same or similar fields of endeavor, disclose the method facilitating communications between a home register database and a computer operable on the second network, so that authorization commands can be issued directly from the home register database to the computer on the second network (see column 1 lines 22-45, MSC-V comprising VLR issues authorization commands directly to the wireless unit); the means for converting employing a single entry to represent plural subscribers on the second network that have roamed to the first network (see Figure 3 database 80 and column 14 lines 25-48, the international gateway include a single database); and the means for converting operating in a separate computer system from a home registration database (see Figure 1, international gateway does not perform HLR/VLR functionalities).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement the method facilitating communications between a home register database and a computer operable on the second network, so that authorization commands can be issued directly from the home register database to the computer on the second network; the means for converting employing a single entry to represent plural subscribers on the second network that have roamed to the first network; and the means for converting operating in a separate computer system from a home registration database as taught by Adamany et al. into the method/system of

Bertacchi and Gallagher et al. in order to allow a wireless unit to roam in a visited wireless communication system more efficiently.

regarding claims 2, 9, and 16, the step of converting the first network messaging protocol further comprises a step of deriving a destination point code in the second network (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the domestic GMSC);

regarding claims 3, 10, and 17, the step of converting the second network messaging protocol further comprises a step of deriving a destination point code in the first network (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the domestic GMSC);

regarding claims 4, 5, 11, 12, 18, and 19, the step of converting the first/second network messaging protocol further comprises a step of converting a format of an originator's address (see column 6 line 60 – column 7 line 9, the domestic VMSC or GMSC translates the received MSCID into a MSCID compatible with the signaling system used by the foreign cellular network);

regarding claims 6, 7, 13, 14, 20, and 21, the step of converting the first/second network messaging protocol further comprises a step of converting a format of a destination address ((see column 6 line 60 – column 7 line 9, the domestic VMSC or GMSC translates the received physical address into a physical address compatible with the signaling system used by the foreign cellular network).

Conclusion

8. **Examiner's Note**: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAO SINKANTARAKORN whose telephone number is (571)270-1424. The examiner can normally be reached on Monday-Thursday 9:00am-3:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pao Sinkantarakorn/
Examiner, Art Unit 2416

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit 2416

PS